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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,669	02/25/2002	Norihiko Kaga	219879US0	8162

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EXAMINER

TRAN, THAO T

ART UNIT PAPER NUMBER

1711

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/080,669

Applicant(s)

KAGA, NORIHIKO

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Amendments filed on 01/20/2006.
2. Claims 1-15 and 17-20 are currently pending in this application. Claim 16 has been canceled. Claims 1-2 have been amended.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa et al. (US Pat. 6,592,803) or Kabata et al. (US Pat. 6,521,388).

Nakazawa discloses an intermediate transfer belt in an image forming apparatus, the belt comprising a mixture of different thermoplastic resins, such as styrene-acrylonitrile copolymer, styrene-acrylonitrile-acrylate copolymer, polystyrene, polybutadiene, polyester, polyamide. The resin further contains up to 30% by weight carbon black based on the weight of the resin. (See abstract; col. 7, ln. 51-67; col. 8, ln. 1-23). The belt has a volume resistance of 6×10^5 Ohm (see Examples).

Kabata discloses an intermediate transfer belt in an image forming apparatus, the belt comprising a mixture of different resins, including polycarbonate, polyamide, styrene-acrylonitrile copolymers, polyester, polybutadiene, silicone resin, styrene-acrylonitrile-acrylate copolymer (see col. 15, line 60-65; col. 16, ln. 37-67; col. 17, ln. 1-17). The resin mixture further

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contains an electroconductive material, such as carbon black of 15% (18 parts in 100 parts resin) (see col. 17, ln. 18-27; Example 15).

Neither of the reference teaches the specific weight percent of the flexible component of the styrene-acrylonitrile resin in the belt. However, it would have been obvious to one of ordinary skill in the art that the concentration of a component would have been optimized by routine experimentation and would have been adjusted in order to obtain the desired results.

With respect to the glass transition temperature, since the references teach the same chemical, i.e. styrene-acrylonitrile-acrylate copolymer, the flexible of the copolymer of the references would inherently have the same physical properties, such as glass transition temperature.

Response to Arguments

5. Applicant's arguments filed 01/20/2006 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that both Nakazawa '803 and Kabata '388 teach the belt comprising blended resins, not the resins as recited in the presently claimed invention. However, the references do teach the resins including styrene-acrylonitrile-acrylate copolymer that reads on the presently claimed ASA resin (see paragraph 7 above).

With respect to the glass transition temperature, since the references teach the same chemical, i.e. styrene-acrylonitrile-acrylate copolymer, the flexible of the copolymer of the references would inherently have the same physical properties, such as glass transition temperature.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt

March 30, 2006



**THAOT.TRAN
PATENT EXAMINER**